THE FUNGUS TRIBE.

CHAPTER II.

In our last paper we observed that the treasures of food which it has pleased God to provide for us in the fungus tribe are, if not wholly disregarded, at least by no means duly appreciated by the English. There is, perhaps, no country richer than our own in the esculent species of fungi; they abound in our woods and pastures, they grow from the ground and under the ground; they spring abundantly out of the substance of dead trees, and are often found on waste lands and heaps of rubbish, from which no other edible produce can be procured; yet, though this is the case, and more than thirty species of esculent fungi are spontaneously brought forth in England, there are only three or four of these species that are eaten by its inhabitants; all the rest of this abundant supply being allowed to rot under the trees, or to become the prey of field-mice, toads, slugs, and other creatures, to which they afford many a delightful repast.

Throughout the continent of Europe, on the contrary, plants of this tribe are eagerly sought after by all classes of men, and form the chief, if not the sole, diet of thousands, who would otherwise be but scantily provided with aliment. But fungi are not only the tolerated food of the poorer classes, they are also most highly prized by the rich man and the epicure; and afford, when daintily cooked, many a delicate dish and many a highly flavoured sauce at the most elaborately served and highly expensive tables. In Germany and Italy, immense numbers of the various species of this tribe are sold in the markets, and produce an amount of income which would seem to us almost incredible. In Rome, so important are the fungi as an article of commerce, that there is a public officer appointed for the express purpose of testing the species exposed for sale, and superintending this branch of the revenue; for in that market a tax is laid on all

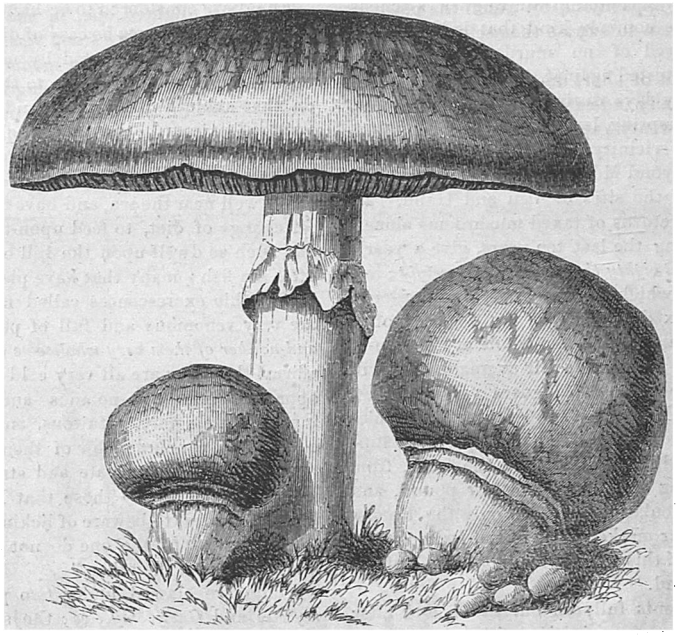

FIG. 1.—AGARICUS CAMPESTRIS (THE MEADOW MUSHROOM).

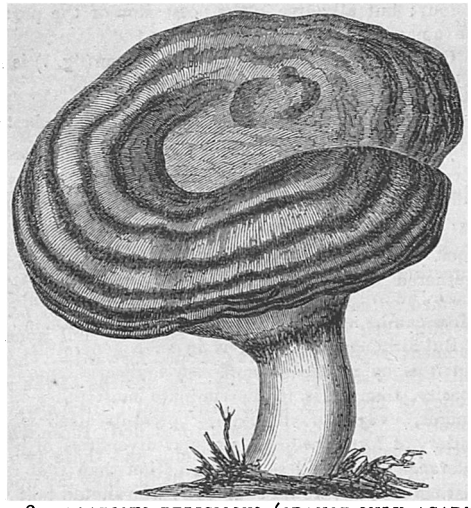

FIG. 2.—AGARICUS DELICIOSUS (ORANGE MILK AGARIC).

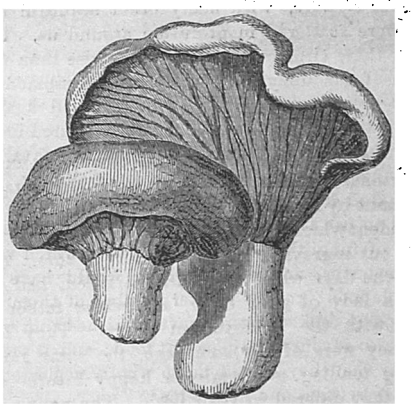

FIG. 3.—CANTHARELLUS CIBARIUS.

quantities of fungi presented for sale exceeding ten pounds in weight. All fungi brought into Rome are supervised by this officer, weighed, sealed up, and all destined for that day's consumption sent to a central depôt. If, among the contents of the baskets offered, any stale, maggot-eaten, or dangerous specimens are found, they are sent under escort, and thrown into the Tiber; and another very remarkable circumstance is the law, that if any specimen of the common mushroom *(Agaricus campestris)* is found, it also is to be *thrown into the river!* So says an unpublished letter of Professor Sanguinetti, "Ispettore dei Funghi," at Rome. It is certainly singular that the only fungus which is freely accepted in all English kitchens, and considered as the sole common kind that is honest and trustworthy, and possessed of no murderous properties, should be the one thus protested against, "whether in a state good or bad!" "For forty days during the autumn, and for about half that period every spring, large quantities of funguses, picked in the immediate vicinity of Rome, from Frascati Rocca di Papa, Albano, beyond Monte Mario, towards Ostia and the neighbourhood of the sites of Veii and Gabii," are brought to Rome. "The returns of taxed mushrooms alone," says Dr. Badham, "during the last ten years, give a yearly average of *between sixty and eighty thousand pounds weight;* and if we double this amount, which we may safely do in order to include such smaller untaxed supplies as are disposed of in bribes, fees, and presents, and reckon the whole at the rate of six baiocchi, or threepence a pound (a fair average), this will make the commercial value of fresh funguses very apparent, showing it here to be little less than £2,000 a year." Besides this, we must consider the dried, pickled, and preserved supplies, which sell at a much higher price than the fresh, from one shilling to one shilling and threepence per pound, and also recollect that this calculation includes only the Roman market, and that every other market-place in the Italian states has its proportionate sale of this wide-spreading branch of the vegetable produce of the land.

With the above statements fully in our mind, and after having been habitually in communication with many of the families from amongst our peasantry who were but scantily provided with daily food, we found ourselves one day, during the last autumn, in an extensive pine-wood near Budleigh Salterston, in South Devon, and saw the ground, which was densely carpeted with the accumulated dead leaves that had fallen from the trees, and lain undisturbed for many years, studded in every direction with fungi, of every colour and of every shape, in such quantities as that cart-loads might have been gathered there. Huge purple, white, brown, and tawny *Agarics* were there; the deep orange of the *Boletus edulis* was interspersed with the snowy balls of the *Lycoperdons*, and the delicate apricot tint of the pretty and singular *Cantharellus cibarius*, with many other beautiful and edible species, were scattered in profusion around us. How could we, under these circumstances, do otherwise than regret that ignorance of the differences of species, combined with the strong prejudice which prevails in England against using any of this tribe (save the two or three favoured individuals), should shut out our poor from the possibility of availing themselves of this rich supply of wholesome aliment, which the bounty of God had provided for them, if they would but be persuaded to use it? It is true, that amongst this extensive collection of fungi there were some species which would have proved poisonous, and others which would have been but disagreeable food; yet the greater number of them were such as, if properly cooked, would have furnished, not only *wholesome*, but also savoury and pleasant food; and it seemed to us a great pity that they should be so wholly neglected, and left for a prey to reptiles and field-mice.

The chemical structure of fungi is said to be the most highly animalised, or, in other words, to partake more of the nature of animal composition than that of any other vegetable. Besides the intimations of this circumstance that are afforded by the smell of some of the species in decay, which partakes much of the character of that of putrid meat, and the strong meat-like flavour which some of them possess when cooked, we find the following fact stated—that, "like animals, they absorb a large quantity of oxygen, and disengage in return from their surface a large quantity of carbonic acid; all, however, do not exhale carbonic acid, but in lieu of it some give out hydrogen, and others azotic gas. They yield, moreover, to chemical analysis the several components of which animal structures are made up; many of them, in addition to sugar, gum, resin, a peculiar acid called fungic acid, and a variety of salts, furnish considerable quantities of *albumen*, *adipocine*, and *osmazome*, which last is that principle that gives its peculiar flavour to meat gravy."

Fungi are considered to be highly nutritious, and are said by many of the faculty to be easy of digestion. This latter opinion, though strongly supported by many foreign medical men, is certainly quite in opposition to the generally received opinion on that subject in England, and also to the ideas of ancient writers. Gerard, the quaint old herbalist, says: "Some mushroomes grow forth of the earth: others upon the bodies of old trees, which differ altogether in kinds. Many wantons that dwell near the sea, and have fish at will, are verie desirous, for change of diet, to feed upon the birds of the mountaines; and such as dwell upon the hill or champion grounds do long after sea fish; many that have plentie of both do hunger after the earthie excrescences called mushroomes; whereof some are very venomous and full of poison, others not so noisome, *and neither of them very wholesome meat.*" And again—"Galen affirms that they are all very cold and moist, and therefore do approach unto a venomous and murthering facultie, and ingender a clammy, pituitous, and cold nutriment if they be eaten. To conclude, few of them are good to be eaten, and most of them do suffocate and strangle the eater. Therefore I give my advice to those that love such strange and new-fangled meates, to beware of licking honey among thornes, lest the sweetnesse of the one do not countervaile the sharpnesse and pricking of the other."

Fungi are classed under two primary divisions—*Hymenomycetes* and *Gasteromycetes;* the seed lying externally in the former, and internally in the latter. These divisions are subdivided into four tribes—1st, *Pileati;* 2nd, *Clavati;* 3rd, *Mitrati;* and 4th, *Cupulati*. In each of these tribes we find esculent species, although most of that description are found in the first tribe, the *Pileati*, and of that tribe the genus *Agaricus* supplies the largest number of any of the genera.

All Agarics are furnished with a fleshy pileus or cap, a stipes or stem, and gills placed at right angles with their stem. The species of this genus differ widely in size, shape, and colour; but all agree in the possession of the parts which we have named.

Our own favourite meadow-mushroom (fig. 1) is the first we will describe, of which old Gerard says:—

> "The meadowe mushroom is in kinde the best;
> It is ill trusting any of the rest."

Every one considers himself a complete judge of this species, and few hesitate to present at their tables a dish of these agreeable fungi, without taking any other means of proving their trustworthiness than that most fallacious mode of directing their cook to stir them whilst dressing *with a silver spoon;* in full belief that if their juices do not tarnish the silver, there can be no injurious specimen amongst them.

But although this kind is in such general use in England, yet it is by no means more easy to discriminate *it* from other species, than it is to discriminate most other kinds. "No fungus," says Dr. Badham, "presents itself under such a variety of forms or such singular diversities of aspect. The inference is plain; less discrimination than that employed to distinguish this, would enable any who should take the trouble to recognise at a glance many of those esculent species which every spring and autumn fill our plantations and pastures with plenteousness." The cap of this mushroom is in some individuals snowy white and smooth; in others, brown and scaly; in some instances the gills are of a delicate pink; in others of a deep, rusty black; some grow broad and flat, others in the form of buttons, looking almost like a puff-ball

of a soft, smooth texture, and of a pure white colour. The stem in some varieties is nearly straight, as in the larger one in our cut; in others it is broader, by one-third, at the top than at the bottom, and altogether shorter than it is wide, the under part of the cap being upturned at an obtuse angle with the bulky stem so as to display the coarse-looking, dark gills which line it.

It is a pleasant thing to sally forth early in the day, under the first burst of sunshine which breaks out on a soft, clear morning in September; and to see how the night dews have been at work in hastening the growth of fungi. We need hardly say that mushrooms are excellent pickled. The way to do this is to select all the *buttons;* place them skins and all in a stewpan with allspice, salt, and pepper; stew them until they have given out every drop of their juice, and (like children who give and then repent, and take back again) have re-absorbed all those juices charged with the flavour of the spices amongst which they have been straying. When this process is completed, add as much hot vinegar as will cover your mushrooms, boil them just for a minute, and they are finished. The large broad specimens are delicious, broiled with salt and pepper; and the middle-sized kinds, stewed in their own juice, with a little pepper, salt, and butter. Whatever the Italians may say, the *Agaricus campestris* is a delicious article of food; and it is a very rare thing for any injurious effect to arise from partaking of them.

Agaricus deliciosus (fig. 2), the "Orange milk Agaric," is another which is in high repute; it may be found in the fir plantations of Scotland, as also on those of the barren hills at Barr in Staffordshire, as well as near Guildford in Surrey, and in some other places. This fungus is of a dull reddish orange, with a somewhat viscid cap, frequently lined with concentric circles of rather a brighter hue. It has narrow branched gills approaching flame colour; the stem is orange, solid, and tapering downwards, slightly bent, from two to three inches high, and covered at the base with short pointed hairs; the flesh of the cap, or pileus, is firm, and filled with red-orange milk, which turns green when exposed to the air, as does the whole plant when bruised. Badham and Loudon agree in stating it to be very excellent food, and much in request in the Italian markets. Sowerby says, "It was very luscious eating, full of rich gravy, with a little the flavour of muscles;" and Sir James Smith, "that it really deserves its name, 'A. deliciosus,' being the most delicious mushroom known." Badham says, "It may be served with white sauce, or fried; but the best way to cook them, after duly seasoning with salt and pepper, and putting a piece of butter upon each, is to bake them (in a closely-covered pie-dish) for about three-quarters of an hour."

Another of the *Pileati* which we must notice is the *Cantharellus cibarius* (fig. 3), an exceedingly pretty fungus, of a soft apricot hue throughout both cap and stem; and instead of gills, it is furnished with thick veins or plaits, very elegant in appearance. It is irregular in form, and the stems are seldom, if ever, in the centre of the cap. Loudon says that the best way of preserving them for use is to string them in rows after they have become flaccid, and hang them in a dry place, where they can have plenty of air; they then form a delicious ingredient in rich gravies. Vittadini, an Italian writer on the subject, says that the common people in Italy dry, or pickle them, or keep them in oil for winter use, and recommends, as they are rather tough, to soak them for a night in milk, when they should be gently stewed either with other fungi or with meat, or else alone.

SCULPTURE IN THE NEW CRYSTAL PALACE AT SYDENHAM.

One of the greatest wonders of the English Great Exhibition was the building in which the vast collection of industrial and artistic productions was enshrined. It was a thing altogether unprecedented, combining lightness, magnitude, and stability, in a degree never before known. Yet, marvellous as it was, it seems likely to be completely eclipsed by the splendour of the magnificent structure now just completed at Sydenham. Indeed, we may venture to predict that, as the first temple at Jerusalem was surpassed by the greater glory of the second, so the building in Hyde-park will be all but banished from recollection by the superior grandeur of the Sydenham palace, or if remembered at all, it will be chiefly as the parent of the present edifice. The former building was merely intended to answer a temporary purpose; the present is to be one of the established institutions of the country. The one was mainly devoted to purposes of practical utility; the other will minister as much to the gratification of the taste, and even the amusement of visitors, as to their solid improvement. Hence more attention has been paid to the general beauty of the edifice; its interior will be decorated in a higher style; its contents will be more varied, and its conveniences more multiplied, so as to make it an agreeable resort at all seasons and in all weathers. To these numerous attractions must be added the picturesque scenery and beautifully laid out gardens and grounds by which it is surrounded.

The Fine Arts Court will form a very interesting feature in the new crystal palace. Among other remarkable productions of high art, it contains a fine cast of the celebrated marble sculpture known by the name of the *Toro Farnese*, or Farnese Bull, and represented in the accompanying engraving (p. 296). This group was cut out of a solid block of marble by two brothers, Apollonius and Tauriscus, who came from Tralles, a town in Cilicia, Caria, or Lydia. According to Pliny, there was in his time an inscription on the marble, in which the two artists made mention of Artemidorus, their father, and Menecrates, their master.

Under the reign of Augustus this group was at Rhodes. Asinius Pollio, a rich patrician, and a great patron of literature and art, whose favour towards the poet Virgil has secured him an honourable immortality, purchased it and had it conveyed to Rome. Buried in obscurity for a long series of ages, it was discovered about the year 1547, during the pontificate of Paul III., in the hot baths of Caracalla. It was found to be in a mutilated condition. A Milanese artist named Baptiste Bianchi, or Biondi, was commissioned to restore it. For a long time it formed part of the collection in the Farnese Palace at Rome, whence arose the name it now bears. In the last century it was conveyed to Naples, and employed to decorate the beautiful garden of Chiaja, which is washed by the sea, and forms part of what is called Villa-Reale, or the Royal Villa. At the present time it stands on the ground-floor of the Bourbon Museum, in a large hall, facing the celebrated Farnese Hercules, executed by Glycon of Athens.

It is well known that this gigantic composition represents Amphion and Zethys preparing the punishment of Dirce, their step-mother, in revenge for their mother Antiope. Lycus, the King of Thebes, says the legend, had divorced his wife Antiope to marry Dirce. The new spouse, impelled by violent hatred, had Antiope, whom she had supplanted, exposed to the fury of wild beasts, together with her two sons, Zethys and Amphion. But a shepherd rescued the two sons, and the mother herself joined them on Mount Cithæron. Lycus and Dirce having met them there during the feast of Bacchus, Zethys and Amphion defended their mother, killed Lycus, and tied Dirce by her hair to the horns of a young bull, which rushed with her over the rocks and tore her to pieces.

Dirce is the principal figure in the group. Turned sideways, she is endeavouring to push away the bull which is just on the point of trampling her under foot, and she implores the pity of one of her enemies. But the two brothers have already fastened to the horns of the furious animal the cord which is intertwined at its other extremity with the hair of the ill-fated woman. Antiope stands in the background observing the preparations for vengeance without emotion. The festoons